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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/732,860	12/11/2003	Shinji Yamamoto	61282-050	8167

7590 10/04/2007

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EXAMINER	
NEGRON, WANDA M	

ART UNIT	PAPER NUMBER
2622	

MAIL DATE	DELIVERY MODE
10/04/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/732,860	YAMAMOTO ET AL.	
	Examiner	Art Unit	
	Wanda M. Negrón	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 July 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *6-11,13,14,20-25,27 and 28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *6-11,13,14,20-25,27 and 28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *7/5/07* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 6-11,13-14, 20-25 and 27-28 are rejected under 35 U.S.C. 102(b) as being anticipated by Ward (GB 2,284,318 A).

Regarding **claims 6, 7 and 8**, Ward discloses a flicker detecting method comprising the steps of calculating a lightness value for each of at least two lines in a frame of a video (see page 6, lines 11-18), and comparing the lightness value of at least two of said at least two lines (see page 6, lines 19-24). Ward also discloses the step of extracting a fluctuation cycle of lightness difference between adjacent lines of pixels, i.e. detecting a cycle of large differences in lightness amplitude between adjacent lines of pixels within a field or a frame caused by light or dark horizontal bands caused by flicker (see page 7, line 27 – page 8, line 4), from differences of the lightness values in a vertical scanning direction of the frame obtained from a result of the comparing step (see page 6, lines 25-28).

Regarding **claim 9**, Ward discloses that the extracting step includes taking differences from the result of the comparing step, i.e. outputting a positive pulse followed by a negative pulse indicating dark to light transitions, and vice versa (see

page 6, line 25 – page 7, line 3), and counting a number of continuations of an identical code from the differences, i.e. detecting continuous time periods between consecutive positive pulses or consecutive negative pulses (see page 7, line 14-21).

Regarding **claim 10**, Ward discloses the step of deciding that a flicker is present from a result of the extracting step, i.e. determining the presence of a dark or light horizontal bar (see page 7, lines 4-6).

Regarding **claim 11**, Ward discloses that, at the deciding step, deciding that the flicker is present when the fluctuation cycle is within a predetermined frequency range, i.e. taking into account only large amplitude changes in lightness while discarding small differences in APL (see page 7, line 25 – page 8, line 4).

Regarding **claim 13**, Ward discloses a flicker detecting method comprising the steps of calculating a lightness value for each of at least two lines in a frame of a video (see page 6, lines 11-18), and comparing the lightness value of at least two of said at least two lines (see page 6, lines 19-24), wherein the frame or the field is divided into a plurality of blocks, e.g. blocks comprising three consecutive lines in the frame (see page 6, lines 19-24), and, wherein at the comparing step, the lightness value, i.e. the APL, of at least two of said at least two lines are compared in each of the plurality of blocks (see page 6, lines 19-24). Ward also discloses the step of extracting a fluctuation cycle of lightness difference between adjacent lines of pixels, i.e. detecting a cycle of large differences in lightness amplitude between adjacent lines of pixels within a field or a frame caused by light or dark horizontal bands caused by flicker (see page 7, line 27 –

page 8, line 4), in each of the plurality of blocks from a result of the comparing step (see page 6, lines 25-28).

Regarding **claim 14**, Ward discloses the step of deciding that a flicker is present when a number of blocks in which the fluctuation cycle is within a predetermined frequency range is within a predetermined value, i.e. determining the presence of a dark or light horizontal bar (see page 7, lines 4-6) only taking into account large amplitude changes in lightness while discarding small differences in APL (see page 7, line 25 – page 8, line 4).

Apparatus **claims 20-25 and 27-28** are drawn to the apparatus corresponding to the method of using same as claimed in claims 6-11 and 13-14. Therefore, apparatus claims 20-25 and 27-28 correspond to method claims 6-11 and 13-14, and are rejected for the same reasons of anticipation as used above.

Response to Arguments

Applicant's arguments filed 7/5/2007 have been fully considered but they are not persuasive.

Applicant asserts on page 8 that the reference to Ward does not teach a step or means for extracting a fluctuation cycle of lightness difference between adjacent lines of pixels because "[i]n Ward, the small lightness difference between the adjacent lines is ignored and only the large fluctuation is detected", therefore, "the invention of Ward is unable to detect the cycle of the light source".

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., detecting the cycle of the light source, described as "an illuminated light in which a brightness fluctuates at a power frequency", on page 1, lines 9-13 of Applicant's specification), are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

It is further noted that the invention of Ward clearly teaches the step of extracting a fluctuation cycle of lightness difference between adjacent lines of pixels, interpreted as detecting a cycle of large differences in lightness amplitude between adjacent lines of pixels within a field or a frame caused by light or dark horizontal bands indicative of a light source fluctuation cycle (see page 2, lines 19-24, and page 7, line 25 – page 8, line 4). In other words, the fluctuation cycle detected by the invention of Ward consists of a large difference in dark-to-light (light-to-dark) lightness amplitude between adjacent lines followed by another large difference in light-to-dark (dark-to-light) lightness amplitude between adjacent lines.

For the foregoing reasons, the rejection is still deemed proper and has been maintained.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wanda M. Negrón whose telephone number is (571) 270-1129. The examiner can normally be reached on Mon-Fri 6:30 am - 4:00 pm alternate Fri off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Wanda M. Negrón/
Examiner, Art Unit 2622
September 28, 2007

DAVID OMETZ
SUPERVISORY PATENT EXAMINER